

WHAT IS CLAIMED IS:

machining is before or after forming
1. A process ²⁷² for forming workpieces in a forming system which has at least one forming station, comprising transporting the workpieces from or to the at least one forming station, and, outside a time period provided for the forming of a particular workpiece in the forming system, carrying out a ^{cl 219, 83, 451 etc} machining with a local energy feed to the particular workpiece.

2. The process according to claim 1, wherein the ²¹⁹ machining of the workpiece comprises a beam machining.

3. The process according to claim 2, wherein the beam ²¹⁹ machining of the workpiece is a laser beam machining, a plasma ⁸³ jet machining, a water jet machining or a sandblasting ⁴⁵¹ machining.

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4. The process according to claim 2, wherein the beam ²²⁸ machining of the workpiece is a welding machining, a cutting machining, a removal machining or an application machining.

5. The process according to claim 1, wherein the machining of the workpiece comprises a feeding of electromagnetic energy into the workpiece.

6. The process according to claim 1, wherein the forming system operates at a predetermined cycle, with the machining of the workpiece being carried out with a local energy feed in the predetermined cycle.

7. The process according to one of claims 1, wherein the machining of the workpiece is carried out during the transport of the particular workpiece.

8. The process according to one of claim 1, wherein the machining of the workpiece is carried out while the workpiece is situated in the area of the forming station.

9. The process according to claim 8, wherein during the machining in the area of the forming station, the workpiece is situated on a depositing element.

10. The process according to claim 7, wherein during the machining in the area of the forming station, the workpiece is situated on an intermediate depositing device.

11. The process according to claim 10, wherein the intermediate depositing device is moved for machining the workpiece.

12. A system for carrying out a process for forming workpieces in a forming system which has at least one forming

A) Cont'd
station, comprising transporting the workpieces from to the at least one forming station, and with at least one machining station for the local energy feeding arranged inside the forming system, wherein at least one machining device with a local energy feed is arranged on a transport device for the workpieces.

13. A system for carrying out a process for forming workpieces in a forming system which has at least one forming station, comprising transporting the workpieces from or to the at least one forming station, and with at least one machining station for the local energy feeding arranged inside the forming system, wherein at least one machining device with a local energy feed is fixedly arranged in the forming system.

14. The system according to claim 12, wherein the machining device is provided with at least one machining element.

15. The system according to claim 12, wherein the transport device has at least one rail and at least one suction bridge movably arranged on the rail, on which suction bridge the at least one machining device is mounted.

16. The system according to claim 15, wherein at least one machining element is mounted via a guiding element on the suction bridge.

17. The system according to claim 16, wherein at least one machining element is mounted on the guiding element via a manipulation device.

18. The system according to claim 12, wherein the transport device has at least one separate slide block on which the at least one machining station is mounted.

19. The system according to claim 18, wherein the machining element is mounted on the slide block by way of an adjusting element, the machining element being arranged to be movable via the adjusting device transversely to the transport direction of the workpiece.

20. The system according to claim 19, wherein the at least one machining element is mounted on a separate manipulation device in the forming system.

21. The system according to claim 17, wherein the manipulation device is configured to be programmable.

22. The system according to claim 20, wherein the manipulation device has a cross traverse and at least one stroke element provided for vertical adjustment of the cross traverse.

23. The system according to claim 22, wherein the at least one machining element is arranged to be movable approximately perpendicularly to the transport direction.

24. The system according to claim 23, wherein the at least one machining element is arranged to be movable by a linear guide at least approximately perpendicular to the transport direction.

25. The system according to one of claim 12, wherein the at least one machining element comprises a laser head.